# PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the modification of the existing traffic control signal at the intersection of MD 193 and Stadium Drive in Prince George's County, Maryland.
MD 193 is considered to run in an east/west direction.

II. INTERSECTION OPERATION

The intersection currently operates in a NEMA six (6) phase, full-traffic-actuated mode. There is an exclusive left turn phase for both the east and westbound movement of MD 193. The MD 193 through movements operate concurrently. The Stadium Drive through movements operate concurrently with an actuated pedestrian movement across the east and west leg of the intersection.

The existing cabinet/controller will be utilized. The existing 2-channel loop detector amplifiers will be replaced with new 4-channel rack mounted loop detector amplifiers.

# EQUIPMENT LIST

A. Equipment to be furnished and/or installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

| Quantity | Units | Specification Section | | Description |
|---|---|---|---|---|
| Lump Sum | LS | 108 | | Mobilization. |
| Lump Sum | LS | 104 | | Maintenance of traffic. |
| 3 | EA | 814 | | 12 in., one-way, three section (RA,YA, GA) adjustable black faced traffic signal head with span wire mounting hardware and tunnel visors. |
| 2 | EA | 814 | | 12 in., one-way three section (R,Y,G) adjustable black faced traffic signal head with span wire mounting hardware and tunnel visors. |
| 4 | EA | --- | | Micro-loop probe (set of 3) with 1000 ft. lead-in cable. |
| 4 | EA | --- | ★ | 4 channel rack mounted loop detector amplifiers. |
| 1 | EA | --- | ★ | Rack mounted loop detector amplifier retrofit kit. |
| 1 | EA | --- | ★ | Power supply for rack mounted loop detector amplifiers. |
| 6 | EA | 811 | | Handhole. |
| 1040 | LF | 815 | | Sawcut for signal loop detector. |
| 2840 | LF | 810 | | Loop detector wire (No. 14 A.W.G.) encased in flexible tubing. |
| 2590 | LF | 810 | | 2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.). |
| 345 | LF | 810 | | 5-conductor electrical cable (No. 14 A.W.G.). |
| 40 | LF | 805 | | 1 in. liquid tight flexible non-metalic conduit for loop detector sleeve. |
| 45 | LF | 805 | | 1 in. galvanized steel electrical conduit for loop detector sleeve. |
| 220 | LF | 805 | | 3 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched. |
| 80 | LF | 805 | | 4 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched. |
| 230 | LF | 805 | | 4 in. polyvinyl chloride (Schedule 80) electrical conduit - slotted in roadway. |
| 1 | EA | 813 | | 24 in. x 78 in. M95-1 sign with span wire mounting hardware. |
| 135 | LF | 550 | | 24 in. wide white HAPPTPM pavement marking for stop line. |
| 1030 | LF | 550 | | 12 in. wide white HAPPTPM pavement marking for crosswalk. |
| 2 | EA | --- | | Realign existing traffic signal head. |
| Lump Sum | LS | --- | | Remove existing traffic signal equipment. |
| 3 | EA | --- | | Frame and cover for existing handhole. |
| Lump Sum | LS | --- | | As-built for S.H.A. (on CADD). |

★ Note: To be installed by MD-SHA Signal Shop.

C. Existing equipment to be removed by the Contractor and delivered to the MDSHA Office of Traffic and Safety, Traffic Operations Division, Traffic Signal Shop, 7491 Connelley Drive, Hanover MD, 21076. A twenty-four (24) hour notice is required prior to delivery. Please contact Mr. Ed Rodenhizer at (410) 787-7650.

| Quantity | Units | Description |
|---|---|---|
| 8 | EA | 2-channel loop detector amplifiers. |

Note, All equipment and/or material not listed above shall become the property of the Contractor.

# CONTACT LIST

The contact persons for District #3 are as follows:

Mr. Charlie Watkins
District Engineer
301-513-7313

Mr. Majib Shakib
Assistant District Engineer - Traffic
301-513-7358

Mr. Augie Rebish
Assistant District Engineer - Utility
301-513-7350

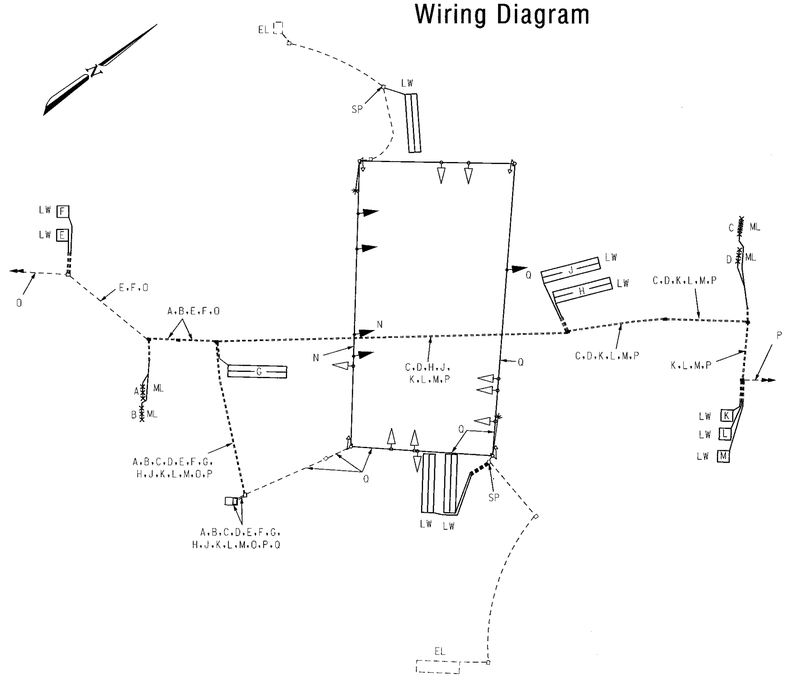
Mr. Randy Brown
Assistant District Engineer - Maintenance
301-513-7304

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

# Phase Chart

| | 1 | 2 | 3 | 4 | 5 | 6 | 19 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15-18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase 1 & 5 | ◄G— | ◄G— | R | R | ◄G— | ◄G— | ◄G— | R | R | R | R | R | R | R | R | DW | |
| 1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6 | | | | | | | | | | | | | | | | | |
| Phase 1 & 6 | ◄G— | ◄G— | G | R | ◄R— | ◄R— | ◄R— | R | R | R | R | R | R | R | R | DW | |
| 1 Change | ◄Y— | ◄Y— | G | R | ◄R— | ◄R— | ◄R— | R | R | R | R | R | R | R | R | DW | |
| Phase 2 & 5 | ◄R— | ◄R— | R | G | ◄G— | ◄G— | ◄G— | R | R | R | R | R | R | R | R | DW | |
| 5 Change | ◄R— | ◄R— | R | G | ◄Y— | ◄Y— | ◄Y— | R | R | R | R | R | R | R | R | DW | |
| Phase 2 & 6 | ◄R— | ◄R— | G | G | ◄R— | ◄R— | ◄R— | R | R | R | R | R | R | R | R | DW | |
| 2 & 6 Change | ◄R— | ◄R— | Y | Y | ◄R— | ◄R— | ◄R— | R | R | R | R | R | R | R | R | DW | |
| Phase 4 & 8 | ◄R— | ◄R— | R | R | ◄R— | ◄R— | ◄R— | R | G | G | G | G | G | G | G | DW | |
| 4 & 8 Change | ◄R— | ◄R— | R | R | ◄R— | ◄R— | ◄R— | R | Y | Y | Y | Y | Y | Y | Y | DW | |
| Phase Alt 4 & Alt 8 | ◄R— | ◄R— | R | R | ◄R— | ◄R— | ◄R— | R | G | G | G | G | G | G | G | WK | |
| Ped Clearance | ◄R— | ◄R— | R | R | ◄R— | ◄R— | ◄R— | R | G | G | G | G | G | G | G | FL/DW | |
| Alt 4 & Alt 8 Change | ◄R— | ◄R— | R | R | ◄R— | ◄R— | ◄R— | R | Y | Y | Y | Y | Y | Y | Y | DW | |
| Flashing Operation | ◄FL/R— | ◄FL/R— | FL/Y | FL/Y | ◄FL/R— | ◄FL/R— | ◄FL/R— | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R | FL/R | FL/R | DARK | |

# Wiring Diagram




A, B, C, D } Micro-loop Detector Lead-in Cable

E, F, G, H, J, K, L, M } 2-Conductor Cable (Aluminum Shielded)

N, Q } 5-Conductor Electrical Cable (No. 14 A.W.G.)

O — Existing Interconnect Cable (Stadium Drive - Adelphi Rd. Run)

P — Existing Interconnect Cable (Stadium Drive - Paint Branch Dr./ Metzerott Rd. Run)

EL — Existing Loop Detector Wire

LW — Loop Detector Wire (No. 14 A.W.G.) In Flexible Tubing

SP — Splice Loop Wire To Existing Aluminum Shielded Cable

ML — Micro-loop Detector

Revision " A"

The Traffic Group
*The Traffic Group, Inc.*
*410-931-6600*
*Fax 410-931-6601*

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

ORIGINAL ON FILE

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**
*Office of Traffic & Safety*
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)
*MD 193 (University Blvd.) at Stadium Drive*

| | | | | | |
|---|---|---|---|---|---|
| DRAWN BY: | Frank Hoeckel | F.A.P. NO. | N/A | TS NO. | SHEET NO. |
| CHECKED BY: | | S.H.A. NO. | BW996M82 | 1010A-GI | |
| SCALE: | N/A | COUNTY: | Prince George's | T.I.M.S. NO. | 4 OF 7 |
| DATE: | August 23, 2001 | LOG MILE: | | E-758 | |

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